

CLAIMS

WHAT IS CLAIMED IS:

1. A substrate inspection system comprising:

a first inspection apparatus executing a macro inspection of each of a plurality of

5 substrates and outputting information on presence/absence of a defect on each of the substrates;

a storage unit storing therein for each of the substrates the information on presence/absence of a defect outputted from said first inspection apparatus; and

10 a second inspection apparatus executing an inspection of a predetermined portion of

the substrate, wherein

said second inspection apparatus refers to the information on presence/absence of a defect stored in said storage unit and executes the inspection of substrate(s) of the plurality of substrates, the substrate(s) being one(s) that does/do not have the defect.

2. The substrate inspection system according to claim 1, wherein

15 said second inspection apparatus executes the inspection by measuring a relative offset between a resist pattern formed on a surface of the substrate and an underlying pattern.

3. A substrate inspection system comprising:

a first inspection apparatus executing a macro inspection of each of a plurality of

20 substrates and outputting information on distribution of a defect on each of the substrates;

a storage unit storing therein for each of the substrates the information on distribution of a defect outputted from said first inspection apparatus; and

a second inspection apparatus executing an inspection of a predetermined portion of the substrate, wherein

25 said second inspection apparatus refers to the information on distribution of a defect

stored in said storage unit and executes the inspection of substrate(s) of the plurality of substrates, the substrate(s) being one(s) that does/do not have the defect distributed in the predetermined portion.

4. The substrate inspection system according to claim 3, wherein

5 said second inspection apparatus executes the inspection by measuring a relative offset between a resist pattern formed on a surface of the substrate and an underlying pattern.

5. A substrate inspection system comprising:

a first inspection apparatus executing a macro inspection of each of a plurality of substrates and outputting information on distribution and classification of a defect on each of the substrates;

a storage unit storing therein for each of the substrates the information on distribution and classification of a defect outputted from said first inspection apparatus; and

10 a second inspection apparatus executing an inspection of a predetermined portion of the substrate, wherein

said second inspection apparatus refers to the information on distribution and classification of a defect stored in said storage unit and determines substrate(s) to be inspected from the plurality of substrates.

15 6. The substrate inspection system according to claim 5, wherein

20 said second inspection apparatus determines substrate(s) to be inspected according to how much a kind of the defect contained in the classification information is associated with a kind of a defect detectable by said second inspection apparatus.

7. The substrate inspection system according to claim 5, wherein

25 said second inspection apparatus executes the inspection by measuring a line width of a resist pattern formed on a surface of the substrate.

8. A substrate inspection method comprising:

a first inspection step of executing a macro inspection of each of a plurality of substrates and outputting information on presence/absence of a defect on each of the substrates;

5 a storage step of storing for each of the substrates the information on presence/absence of a defect outputted in said first inspection step; and

a second inspection step of executing an inspection of a predetermined portion of the substrate, wherein

in the second inspection step, the information on presence/absence of a defect stored in said storage step is referred to, and the inspection is executed on substrate(s) of the plurality of substrates, the substrate(s) being one(s) that does/do not have the defect.

9. The substrate inspection method according to claim 8, wherein

in the second inspection step, the inspection is executed by measuring a relative offset between a resist pattern formed on a surface of the substrate and an underlying pattern.

10. A substrate inspection method comprising:

a first inspection step of executing a macro inspection of each of a plurality of substrates and outputting information on distribution of a defect on each of the substrates;

a storage step of storing for each of the substrates the information on distribution of a defect outputted in said first inspection step; and

a second inspection step of executing an inspection of a predetermined portion of the substrate, wherein

in the second inspection step, the information on distribution of a defect stored in the storage step is referred to, and the inspection is executed on substrate(s) of the plurality of substrates, the substrate(s) being one(s) that does/do not have the defect distributed in the

predetermined portion.

11. **The substrate inspection method according to claim 10, wherein**

in the second inspection step, the inspection is executed by measuring a relative offset between a resist pattern formed on a surface of the substrate and an underlying pattern.

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12. **A substrate inspection method comprising:**

a first inspection step of executing a macro inspection of each of a plurality of substrates and outputting information on distribution and classification of a defect on each of the substrates;

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a storage step of storing for each of the substrates the information on distribution and classification of a defect outputted in said first inspection step; and

a second inspection step of executing an inspection of a predetermined portion of the substrate, wherein

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in the second inspection step, the information on distribution and classification of a defect stored in said storage step is referred to, and substrate(s) to be inspected is/are determined from the plurality of substrates.

13. **The substrate inspection method according to claim 12, wherein**

in the second inspection step, substrate(s) to be inspected is/are determined from the plurality of substrates according to how much a kind of the defect contained in the classification information is associated with a kind of a defect detectable in the second inspection step.

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14. **The substrate inspection method according to claim 12, wherein**

in the second inspection step, the inspection is executed by measuring a line width of a resist pattern formed on a surface of the substrate.

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15. **A substrate inspection apparatus comprising:**

a storage unit storing therein information on presence/absence of a defect on each of a plurality of substrates, the information being obtained as a result of a macro inspection of each of the substrates; and

an inspection section executing an inspection of a predetermined portion of the substrate, wherein

said inspection section executes the inspection of substrate(s) of the plurality of substrates based on the information on presence/absence of a defect stored in said storage unit, the substrate(s) being one(s) that does/do not have the defect.

16. A substrate inspection apparatus comprising:

10 a storage unit storing therein information on distribution of a defect on each of a plurality of substrates, the information being obtained as a result of a macro inspection of each of the substrates; and

an inspection section executing an inspection of a predetermined portion of the substrate, wherein

15 said inspection section executes the inspection of substrate(s) of the plurality of substrates based on the information on distribution of a defect stored in said storage unit, the substrate(s) being one(s) that does/do not have the defect distributed in the predetermined portion.

17. A substrate inspection apparatus comprising:

20 a storage unit storing therein information on distribution and classification of a defect on each of a plurality of substrates, the information being obtained as a result of a macro inspection of each of the substrates; and

an inspection section executing an inspection of a predetermined portion of the substrate, wherein

25 said inspection section determines substrate(s) to be inspected from the plurality of

**substrates based on the information on distribution and classification of the defect stored in
said storage unit.**